

*Camaroptera stigmus* (Reichenow), the male breeding  
dress of *Camaroptera fasciolata* (Smith)

by Michael P. Stuart Irwin

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*Calamonastes stigmus* Reichenow, *Orn. Monatsb.*, 18, p. 8, 1910, type locality Windhuk (= Windhoek), South-West Africa, seldom receives mention in the literature, and is tacitly regarded as a synonym of *Camaroptera fasciolata* (Smith). It was based on a bird obtained by Lübbert, without date or indication of sex, in which the normally barred throat and upper chest is replaced by a uniform brown. There is, however, little agreement in the literature as to what plumage stage *stigmus* really represents.

The first critical remarks on this name were by Roberts (1935: 142), on the basis of a single male from Gemsbok Pan, Botswana, obtained on 23rd April. Roberts stated that it was in much worn plumage, which has been confirmed by M. A. Traylor (*in litt.*) who has re-examined the specimen in the Field Museum of Natural History, Chicago, but Roberts incorrectly assumed, in referring this bird to *stigmus*, that the accentuation of the brown markings had been due to wear and abrasion alone. Hoesch and Niethammer (1940: 265) were next to discuss this name, and considered that it represented either a mutant or the juvenile plumage stage. This latter view seems to have been followed by McLachlan and Liversidge (1957: 325), who state that the young have a spotted chin and a uniform brown throat and upper chest. Mackworth-Praed and Grant (1963: 260) merely give the young birds as being more russet brown above, and mention for the species that rarely the throat is wholly dusky. However, Macdonald (1957: 134) more correctly described the juvenile, based on a specimen obtained at Kamanjab on 23rd April, as very like the adult except for a slight wash of yellowish on the breast. It may be added that this yellow wash is short lived but that generally birds with little skull ossification can be distinguished by the duller, heavier and generally less clearly defined barring of the underparts.

In the collection of the National Museum, Bulawayo, there are 41 specimens of *C. fasciolata* collected at all seasons of the year from the following territories: Rhodesia (9), Botswana (30) and South-West Africa (2). Those from Rhodesia and South-West Africa were obtained only in the months of May and June, but the larger Botswana series provide a virtual round the year representation except for the months of June and August, the former month being covered by three of the Rhodesian specimens. Of the Botswana series, no less than 14 specimens, collected between 24th November and 4th March, or in the period of the rains, are of *stigmus* type. Thirteen of these are sexed as males, one as a female. *Stigmus*-plumaged birds are on the other hand not represented at all from any of the series obtained from April onwards, though as shown below, a number of brown-throated birds are known from this month, though not between May and October, the dry season. These brown-throated birds give every indication of being in breeding condition, as would be expected from the time of year. One such bird obtained by the writer near Lake Dow on 19th November, had the gonads greatly enlarged as had another from near Rakops on 24th of the same month. The whole region at this period south of the Makarikari Pan complex, where the species is common, had experienced recent heavy rains and the birds

could be heard calling throughout the day, so breeding was probably by then general.

On this evidence it must be assumed that *stigmosus* is nothing other but a distinctive annual breeding dress: however some slight problem remains. Thus while 10 out of the 14 specimens collected between 24th November and 4th February are a uniform brown, flecked occasionally with buffy white, most noticeable towards the chin, four others collected in the latter half of the rains between 14th February and 4th March have the brown areas more broken up and flecked with buff. In two of these birds obtained respectively on 25th February and 4th March, the throat and chest are actively in moult, with now, more buffy feathering beginning to show against the brown background. A further two males and seven females obtained between 3rd November and 24th April are more problematical. Six of these, all sexed females, are more heavily barred on the throat, chest and flanks, with some incipient tendency towards assuming a brown throat and chest. One such bird collected on 24th April is moulting in this region, while a further two obtained on 12th January (one of them sexed as a male), appear to have been in breeding condition. There may, however, have been some mis-sexing, the two males in reality being females. Accordingly the only completely brown-chested female may also be a male. However, there does appear to be a certain



Breeding dress of *Camaroptera fasciolata*.

Left: ♀ with unusually heavy barring, 25th February.

Right: 2♂♂ in typical *stigmosus* dress, 19th November and 21st January.

amount of individual variation within the *stigmatosus* plumage stage and it is not always easy to assess the degree or state of moult, though it is always most distinctive (photo). It now seems clearly established that the male of *fasciolata* assumes a distinctive breeding dress and that there may be some corresponding darkening of the barring in the females, though this is not so clearly established.

Why exactly the brown plumage stage should sometimes begin to moult out in the latter half of the rains is not fully understood, but it may well depend in general on seasonal climatic conditions, as the population as a whole lives in a region of erratic and irregular rainfall. This is shown by one of the Rhodesian birds still very obviously immature and with little evidence of skull ossification, as late as 27th June. All five of the Rhodesian birds obtained in May are in fully barred winter dress, though all are still in the process of post-breeding moult of the primaries and rectrices.

Apart from the material available in Bulawayo, all other records of *stigmatosus*-type birds known to the writer, that are either sexed or dated, are of males in the breeding season. Thus this applies to the worn bird obtained by Roberts and the two discussed by Hoesch and Niethammer, collected on 21st November and 16th March. Traylor (1965: 363), who obtained two males at Shakawe and Sepopa, informs me that these specimens taken on 16th January and 10th February are both in *stigmatosus* dress. They were then in breeding condition with the plumage moderately worn, though breeding was almost certainly delayed in that year (1962), due to the lateness of the rains.

Mr. C. W. Benson has kindly examined on my behalf the material in the British Museum (Natural History). Of the series there some 20 specimens collected between 13th March and 16th October are in the normal barred plumage. Two further birds, however, are in breeding dress. One, unsexed but undoubtedly a male, is from the "Tatin River, Matabeleland" (see *Ibis*, 1881: 236), at 21° 25' S., 27° 55' E., in what is now Botswana, and was obtained on 13th December, 1880. There is also a more recent Rhodesian specimen from north of Beit Bridge obtained on 5th April and originally from the collection in Bulawayo. Both have the chin white, barred with brown, but whereas the first has some buffy white shafts on the throat, the other is a uniform brown.

Of the first series the only specimens of note are a male from Otjosimgambe, Waterberg, South-West Africa, already apparently in non-breeding dress on 13th March, and there are another two males from near Kamanjab in the Kaokoveld obtained on 13th April in similar plumage. However, if breeding should take place early in a good rainy season, moult into the non-breeding dress would probably be accelerated.

Mr. G. Stuart Keith of the American Museum of Natural History has in turn kindly reported upon the material in that institution. Therein is a single bird in *stigmatosus* dress, a male from South-West Africa, obtained on 6th April, while a female obtained on 10th of the same month is barred throughout, as in another from Lobito Bay, Angola, on 26th April.

The series of birds in the *stigmatosus*-type dress, discussed above, may be summarized by months as follows:

Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
3	2	7	6	2	3

It seems rather surprising that *fasciolata* should have developed such a relatively distinct mode of breeding dress in the male, particularly so as it is

not found in the very closely related *C. stierlingi* and *C. simplex*. Irwin (1960: 47-60) reviewed the relationships of this complex of barred warblers, but demonstrated in particular that this species was distinct from *stierlingi* and that there was a geographical overlap. The reason why such a seasonal dress should have evolved, apparently only fully developed in the males, is obscure.

Nevertheless in this context it is as well to look at the genus *Camaroptera* as a whole. White (1960: 712-718) listed seven species, to which an eighth, *Camaroptera (Euryptila) subcinnamomea*, should now be added, following Clancey (1966: 489). Thus *subcinnamomea* seems to be little more than a somewhat more colourful geographical representative of the *fasciolata* group, with deep cinnamon chestnut distributed over parts of the plumage and with the barring obsolescent, but with a typically "spotted" *fasciolata*-type chin. There is perhaps some geographical overlap between them, but the ecological requirements appear to be distinctive so that for all intents and purposes they would be allopatric.

The genus therefore becomes divisible into two discrete groups. The *fasciolata* group accordingly consists of *fasciolata*, *stierlingi*, *simplex* and *subcinnamomea*, all relatively long-tailed usually barred forms, and the *brachyura* group, with *brachyura*, *superciliaris*, *chloronota* and *lopesi*, the last sometimes retained in a monotypic genus, *Poliolais*. Of the *fasciolata* group only *fasciolata* has a seasonal mode of dress accompanied by sexual dimorphism. In the *brachyura* group, however, both seasonal dress and sexual dimorphism occur. Thus *brachyura* has a seasonal mode of dress in some races, not in others, and the sexes are similar. In *superciliaris* there is neither seasonal dress nor sexual dimorphism, while in *chloronota* the sexes are moderately dissimilar. In *lopesi* they are markedly so, but again there are no seasonal differences. Whether or not a seasonal dress exists or the sexes differ, seems more or less random without any definite pattern in the different species, nor does there appear to be much evidence of a geographical or climatic relationship, except perhaps in the still imperfectly understood *brachyura* racial complex.

Accordingly it is not all that surprising that a seasonal mode of dress linked with sexual dimorphism should occur in at least one member of the *fasciolata* group.

In the preparation of this note my thanks are due to Mr. C. W. Benson for reporting on the material in the British Museum (Natural History) and for commenting on this note in draft; Mr. G. Stuart Keith of the American Museum of Natural History supplied information on the material in that institution, while Major M. A. Traylor also reported on that in the Field Museum of Natural History, Chicago. I am also grateful to Professor Dr. Erwin Stresemann, who examined for me the type of *stigmatosus* in the Zoologische Museum, Berlin, and finally to Mr. P. A. Clancey, Director of the Durban Museum, for the loan of material of *C. subcinnamomea*.

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## A Sheathbill, *Chionis alba* (Gmelin) on St. Helena

by A. Loveridge

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That an Antarctic bird whose normal range is 50° S. (from Kergulen Island to the Falklands) should turn up 4,000 miles away on the north-west coast of St. Helena Island, 15° S., is so remarkable that the circumstances are worth recording.

On 16th May, 1968, until stopped by Supt. Frank Martin of the St. Helena police, some children were observed throwing stones at a pure white bird "rather like a cross between a pigeon and a gull," feeding on the rocks immediately below Jamestown Jetty. It appeared exhausted and next morning was still in the vicinity until picked up by Sergt. Max Fuller, who took it to the Superintendent. Mr. Martin, who is quite familiar with the Island avifauna, noted the wattles, blunt spurs on the wings, sturdy legs with only a trace of web between two of its four toes, so brought it to me for identification.

Except for the naked skin about the base of the beak being greyish, rather than pink, the bird agrees well with the coloured figure in O. L. Austin's 1962, *Birds of the World*, p. 128. The black pupil was narrowly ringed with brownish, encircled by a narrow ring of light blue, beyond which the rest of the eye is greyish-blue. After chloroforming this strange member of the Charadriiformes, in preparing its skin (now M.C.Z. 288,535), I noted that, unlike most seabirds, there was no fat underlying the skin. Yet Sheathbills, though allegedly averse to taking to the water, are said to be good swimmers. The crop contents and body are preserved in alcohol, while from the feathers I removed half-a-dozen semi-transparent lice (*Quadriceps ornatus antarcticus*).

Occasionally stray migrants reach St. Helena, though it is over 1,000 miles from the nearest mainland; the occurrence of this bird was so improbable, however, that I enquired whether any ship from the Falkland Islands or further south had called in lately. I then learned that at 10.30 p.m. on 15th April, 1968—i.e. the day before the Sheathbill was seen on the rocks—a Russian tanker named *Tallin* had put in to James Bay to land a member of the crew requiring medical attention. After receiving treatment the patient returned to his ship which sailed at 2.30 a.m. the same night. This vessel was said to have been in the Antarctic. In this connection it is interesting to see the Sheathbills photographed by H.R.H. the Duke of Edinburgh (1962, *Birds from Britannia*, photos 51, 52) on the rail of his yacht while she was lying off Deception Island, South Shetland Islands.

I take this opportunity of thanking R. A. Paynter, Jr., of the Museum of